

Title (en)

Semiconductor device with SOI structure and method of manufacturing the same

Title (de)

Halbleiter mit SOI-Struktur und seine Herstellungsmethode

Title (fr)

Semi-conducteur avec structure SOI et méthode de fabrication associée

Publication

EP 1193760 B1 20070912 (EN)

Application

EP 01123462 A 20010928

Priority

JP 2000297308 A 20000928

Abstract (en)

[origin: EP1193760A2] A semiconductor device includes a conductive semiconductor substrate laminated or bonded on a conductive support substrate through a first insulating film, a separation trench which separates a device formation region where at least a desired element is formed, from a region of the semiconductor substrate, a separation trench, and a substrate contact region where the semiconductor substrate is not present. The semiconductor device further includes a second insulating film which fills the separation trench and covers a surface of the substrate contact region, an external connection electrode formed above the semiconductor substrate, and a support substrate connecting section which passes through the first insulating film and the second insulating film in the substrate contact region to connect the external connection electrode and the support substrate. <IMAGE>

IPC 8 full level

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CPC (source: EP KR US)

H01L 21/84 (2013.01 - EP KR US); **H01L 27/12** (2013.01 - KR); **H01L 27/1203** (2013.01 - EP US); **H01L 2924/0002** (2013.01 - EP US)

Cited by

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DE FR

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EP 1193760 A2 20020403; **EP 1193760 A3 20050316**; **EP 1193760 B1 20070912**; CN 1207768 C 20050622; CN 1347146 A 20020501; DE 60130422 D1 20071025; DE 60130422 T2 20080605; JP 2002110950 A 20020412; JP 3510576 B2 20040329; KR 100438206 B1 20040701; KR 20020025778 A 20020404; TW 530369 B 20030501; US 2002036330 A1 20020328; US 2002171109 A1 20021121; US 6492683 B2 20021210; US 6541314 B2 20030401

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